1-246 P.04708 JOD-225

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,743)

In application of:

Li et al.

00/450 557

Filed:

Serial No.

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For:

December 9, 1999
Reporterless Genosensors using

**Electrical Detection Methods** 

PATENT 10-21-00

Before the Examiner:

B. Sisson

Group Art Unit: 1655

official top

## RESPONSE TO THE OFFICIAL ACTION MAILED MAY 17, 2000

Assistant Commissioner of Patents Washington, D.C. 20231

Sir:

In response to the Official Action mailed May 17, 2000, Applicants respectfully request reconsideration of the above-identified application in light of the following amendments and remarks.

#### **AMENDMENTS**

### IN THE CLAIMS:

Please amend the following claims:

- 2. (Amended) An apparatus for electrical detection of molecular interactions between an immobilized oligonucleotide probe and a target nucleic acid molecule, comprising:
  - (a) a supporting substrate comprising ceramic, glass, silicon, fabric, or plastic,
  - (b) a plurality of microelectrodes in contact with the supporting substrate,
- (c) a plurality of conjugated polymer films in contact with the microelectrodes and to which oligonucleotide probes are immobilized,
  - (d) at least one counter-electrode in contact with the supporting substrate,
  - (c) a means for producing electrical impedance at each microelectrode,

McDONNELL BOEHNEN HULBERT & BERGHOFF 300 South Wacker Drive Chicago, Illinois 80806 (312) 913-0001

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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,743)

PATENT

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ln applicati	plication of:		
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	Li et al.	)	Before the Examiner:
	533	)	B. Sisson
Serial No.	09/458,553	)	
		)	Group Art Unit: 1655
Filed:	December 9, 1999	)	-
		)	
For:	Reporterless Genosensors using	)	
	Electrical Detection Methods	)	<b>1</b>
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### TRANSMITTAL LETTER

Assistant Commissioner of Patents Washington, D.C. 20231

Sir:

In regard to the above-identified application:

- 1. We are transmitting herewith the attached
  - a. Response to Official Action
  - c. Petition for Extension of Time
- 2. With respect to additional fees:
  - a. An additional fee of \$390.00 is required.
- 3. Please charge the full amount of any required fee, or credit any overpayment to Deposit Account No. <u>13-2490</u>.
- 4. The undersigned hereby certifies that this Transmittal Letter and this paper, as described in paragraph 1 herein above, are being sent via facsimile transmission to the telephone number on the accompany Facsimile Transmittal Sheet, addressed to: Examiner B. Sisson, Group Art Unit 1655, c/o Assistant Commissioner of Patents, Washington, D.C. 20231 on this 17th day of October 2000.

∕Bv:

Kevin E. Noonan, Ph.D.

Reg No. 35,303

McDONNELL BOEHNEN HULBERT & BERGHOFF 300 South Wacker Drive Chicago. Illinois 60606 (312) 913-0001

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OATE:	October 17, 2000	
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RESPONSE TO THE OFFICIAL ACTION MAILED MAY 17, 2000 U.S. PATENT APPLICATION SERIAL NO.09/458,533 FILED DECEMBER 9, 1999 OUR CASE NO. 99,743

NOTES/COMMENTS:

Please deliver to Examiner Sisson as soon as possible.

Certificate of Facsimile Transmission: The undersigned attorney hereby certifies by his signature below that the foregoing papers as described in Paragraph 1 of the accompanying Transmittal Letter was sent by facsimile to the above-identified telephone number on Tuesday the 17<sup>th</sup> day of October 2000.

Kevin E. Noonan Reg. No. 35,303

Please notify Susan Anaszewicz (312/913-0001, ext. 2152) if all pages are not received.